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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/519,611	12/23/2004	Jehan Vanpoperynghe	034299-612	9208

7590
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02/01/2007

EXAMINER

LEE, BENNY T

ART UNIT

PAPER NUMBER

2817

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/01/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/519,611	VANPOPERYNGHE ET AL.	
	Examiner	Art Unit	
	Benny Lee	2817	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 December 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: ____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>17 October 2005</u> . | 6) <input type="checkbox"/> Other: ____ |

The disclosure is objected to because of the following informalities: Page 1, note that the heading “DESCRIPTION” should be deleted as being unnecessary. Page 3, in the heading, note that “Presentation” should be rewritten as --Summary-- for consistency with PTO guidelines. Page 4, paragraph [0016], note that “several tens of percent” should be rephrased for clarity of description. Page 5, paragraph [0019], note that “quickly controlled from outside” should be rephrased as --quickly externally controlled-- for an appropriate characterization. Page 5, paragraph [0020], note that “BOW” should correctly be --BWO-- for an appropriate characterization. Page 5, in the heading, note that “figures” should be rewritten as --drawings-- for consistency with PTO guidelines. Page 6, paragraph [0023], note that “marks” should be rephrased as --reference labels-- for an appropriate characterization. Page 6, in the heading, note that “embodiments of the invention” should be rephrased as --the preferred embodiments-- for an appropriate characterization. Page 6, paragraph [0026], note that --(FIG. 3B)-- should follow “slit G” for consistency with the drawing figure. Page 6, paragraph [0027], note that --(FIG. 3A)-- should be inserted after “contact 2” for consistency with the drawing figure. Page 7, paragraph [0028], note that --as best shown in FIG. 3B-- should be inserted after “the rings” and “see figures” should be rephrased as --see figures 3A, 3B--, respectively for clarity of description. Page 7, paragraph [0029], note that --(FIG. 3A)-- should be inserted after “part p” for clarity of description. Page 7, paragraph [0032], note that --as best shown in FIG. 3A-- should be inserted after “rings C and D” for clarity of description. Page 9, paragraph [0038], note that --A, B, C, D-- should be inserted between “ring” and “place” for consistency with the drawing figure and --(FIG. 4B)-- should be inserted “set of slits 10” for consistency with the drawing figure. Appropriate correction is required.

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The drawings are objected to because of the following: In FIGS. 1 & 2, note that these drawing figures need to be labeled as --PRIOR ART--; With respect to one or both of drawing figures 3A & 3B, note that parameters (a, 2a, 3a, 4a) as described in paragraph [0033] need to be labeled. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The abstract of the disclosure is objected to because of the following: the body of the abstract needs to be in the form of a single paragraph and the title in the abstract and the reference to "Figure 3A" should be deleted as being unnecessary to the abstract. Correction is required. See MPEP § 608.01(b).

Claims 1-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, note that the claim needs to make clear what feature is intended by "it". Moreover, note it is unclear the relationship between the "mechanical means for varying the frequency F" and the "mechanical means for displacing the rings". Note that the specification appears to disclose that the "mechanical means for displacing the rings" in effect functions to provide the "mechanical means for varying the frequency F" and thus these two "means" appear to be one in the same. Clarification is needed.

In claims 4, 6, note that the respective claims need to make clear what corresponding features are intended by the respective recitation of "it".

The following claims have been found objectionable for reasons set forth above:

In claim 2, line 4, note that --said set of-- should be inserted prior to "rods" for consistency in claim language.

In claim 3, line 3, note that --of said one set of pins respectively-- should be inserted between "pin" & "being" and --corresponding-- should precede "ring" for clarity of description; line 4, note that --each one of the-- should be inserted between "which" & "pins" for clarity of description; line 6, note that --corresponding-- should be inserted prior to "pin" & "ring", respectively and "the slits" should be rephrased as --each slit-- for clarity of description.

In claim 4, note that "a PWT, a BWO type tube" should be rephrased as --a progressive wave tube (PWT), a backward wave tube (BWO),-- for an appropriate characterization.

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In claim 5, note that --tube-- should follow "microwave" for an appropriate characterization.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 4 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Woods.

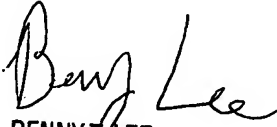
Woods discloses an electron beam tube (i.e. a velocity modulated tube 11, such as a klystron) comprising: at least two tunable cavities having movable tuning flanges (e.g. 46, 48), which correspond to the "rings" recited in applicants' claims. Note that the flanges or "rings" are associated with respective ones of the cavities in the electron beam tube and are mechanically movable (e.g. via adjusting screw 33), such that the respective tuning flanges or "rings" establish a periodic relationship with respect to fixed flange or ring (44) and thus provide a varying frequency for the respective tunable cavities.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Perring discloses an electron beam tube in which a periodic structure is movable.

Any inquiry concerning this communication should be directed to Benny Lee at telephone number 571 272 1764.

B. Lee


BENNY T. LEE
PRIMARY EXAMINER
ART UNIT 2817